









DOTTINGS ON ASTRONOMY.

No. II.

*To the Editor of the Sydney Morning Herald.*

SIR,—Before I resume my "Dottings," allow me knowledge with thanks Mr. F. Napier's correction of an error into which I had fallen, by adopting a relation that has generally been received as correct. Instead of the distance of Sirius from the earth being twenty billions of miles, Mr. Napier states it at 90 billions. In either case, arithmetic fails us to prehend the immense region of space involved in calculation; but it is well to be rightly informed.

Exceedingly gratified am I to learn from Mr. that the projected Observatory is in progress, and

[illegible]

about to notice, as I shall have to refer from time to time to the names of some of the points to other, and make some of the process. Let me here advise those who take an interest in the study of which I am endeavouring to make a history, that the starting points (Nos. 1 and 2) will be well understood as the following will be in a great measure unintelligible to all.

*IV. Arica*, the Kaco, the first sign in the zodiac passing from our view, but may still be seen northwardly, and is the first point of the sign (vide 1) points north-westerly to it. The second sign, *Arctia*, has two others, of the second and third magnitude, near it.

*V. Arica*, the Bull, the second zodiac sign passing from our view, the first point of the east of *Arctia* (4). Besides the principal points, *Altebrava*, or the Bull's-eye, this constellation is remarkable for the beautiful cluster the *Pleides*, a group of seven stars, and the group called the *Hyades*, a group of eight stars, in the head of the Bull. From the *Bellatrix* (1), leads to a star of the third magnitude the North horn of the Bull; and a line from *Redar* (2) leads to the North horn, leads to a star of the fourth magnitude. The elliptic line passes between the horns of the Bull.

*VI. Arica* in *Arctia*, the Waggoner, in

VII. *Lepus*, the Hare, is a pretty group below the horn of the Bull (5) to *Capella*.

VIII. About midway between *Lepus* (7) and (2) is *Columba* *Nobah*, Noah's Dove, a small constellation, having in it a star of the second or third magnitude, called *Phoenice*, the Phoenix, and another star of the third called *Procyon* (3) to rather west of (2) leads to *Canis* (4).

IX. A conspicuous constellation, the third of the Zodiac, is *Gemini*, the Twins, which are rather an extensive range southward. The northern star of the pair is called *Pollux*, and the southern star is called *Caster*, and they are traced by an imaginary line from *Rigel* (1) of the "middle star of Orion's Belt."

X. In *Hydra*, the Water Serpent, the chief stars are *Alpha*, *Beta*, *Gamma*, *Hydra*, *Hydra's Caster* and *Pollux* (9) point southward through the head of the Hydra. The Water Serpent has a lengthy tail, extending to *Centaur* (12), as far as the eye can see. The constellation is frequently called the great serpent, and is frequently traced along the coast of the land of the stars and stripes.

XI. By whatever effort of imagination

various constellations were traced out and named by the Chinese, and were very ill defined, and that they are frequently intricated with each other as to puzzle the observer. The constellation of the Southern constellation, which is the splendid constellation of the justice of his remark in a broad belt of sky extending from *Sirus* (2) to *Centaurus* (12), and which we have *Argo Navis*, with its brilliant star *Antares*, is a constellation which is indicated by four stars in a diamond, which sometimes been mistaken by unpracticed observers for the constellation of *Orion* and *Orion* might be distinguished by its having four stars in a diamond. Very near it, on the South, is *Piscis* the Flying Fish, the position of which it is difficult to find. The constellation of *Crux* (5) and *Argo*. Thus, Charles Owen, is but a comparatively modern, the group of stars so regrettably has quite a little claim to the virtue of antiquity and the right of designation. The constellation of *Centaurus* (12) has two stars, of the first and second magnitude, nearly parallel to the neighbouring stars in *Crux* (5). XII. *Centaurus*, the Centaur, is an extensive constellation, and is the constellation of the principal stars of two superior aspect in the form of the horse, in the far south. They cannot be seen

XIII. *Canis, the Wolf*, is east of *Centaur*, and pursues him spear in hand. It is a constellation, but I should fail to describe it with its proper name, for in fact it is rather an adjunct to *Centaur* than a separate constellation.

XIV. *Triangulum Australe*, the Southern Triangle, is composed principally of three stars of the second and third magnitude, which also form a diamond shape, and with the lower of the two bright stars in *Centaur* (12).

XV. *Cruze, the Cross*.—This constellation, has been greatly over-praised for its brilliancy, and the pitch of its celebrity to a high degree of superstition, is nevertheless a very natural and useful object. It is situated immediately below *Centaur* (12), and consists of three stars of the first, and second magnitude, forming from its diamond shape, a cross, which is the mark of the constellation, and would be more proper if it had a star or two supposed shaft or upright. "The two greatest stars of this constellation, *Gamma* and *Beta*," says Humboldt) have nearly the same distance from the pole as the constellation is almost perpendicular at the moment when it passes the meridian.

tropics or in the Southern Hemisphere.  
at what hour of the night in different seasons  
Gross is erect or inclined. How often (contin-  
ing after) have you seen it? The natives explain,  
SAVANNAH, of Venezuela, or, in the  
from Lima to Truxillo, "Midnight is past, they  
begin to bend."  
of the *Mitla*, Australia, the Southern Fly, is a  
tiful little cluster nearly under the lowest star  
Cross (18).  
XVII. Octans, or Hadley's South Star, is chief-  
ly visible north from the Central Polar Star  
within it. A line drawn through the center  
through Muca (16), leads to the Polar Star,  
group, indefinite, except in a clear night, is at-  
tend, consist of 43 stars.

(To be continued.)

JANUARY  
Borneo-street, Woolloomooloo, 16th February

\* In reference to this group, an American letter-writer  
glances the following curious theory, on the authority of  
the Chinese astronomer, who has been translated into  
English—"Around the brilliant star *Ancora*, in the centre  
of the constellation, are situated two smaller stars, which  
profound examinations, Waucler rather than compe-  
tence, requires the center of gravity, and is at pre-  
sent about which the universe of stars conspire."—

we are now  
certain fixed stars gives us an approximate value of the distance of the grand triangle, and reveals to me the separation of the grand triangle from the earth when it performs its mighty revolution, the distance.

And if we are to rely on the angular velocity of the system, as already determined, at the end of its 270,000 years will have completed one revolution around its central centre.

**ESTIMATES FOR THE ROADS.**

To the Editor of the Sydney Morning Herald.  
SIR,—Can you or can anybody, tell up what estimates for the Roads have been made? I have kept back till two months ago, but the weather has been subtracted from 1857.

Ack Babbie, Gabble, and Company to put this tion to the Ministry, and oblige,

Yours, &c.  
**HUGHWATTS.**

Sloagh, February 23,

[nla.gov.au/nla.news-page](http://nla.gov.au/nla.news-page)















**For Positive Sale.**  
To close a Partnership Ac-

In consequence of the Death of one of the Proprietors,  
NEW ENGLAND.  
The SUGAR-LOAF STATION, with 6227 Sheep, more  
or less.  
TERMS—One-third cash; the residue in 6, 12, and 18  
months.  
**M**ORT and CO. have received instructions  
to sell by public auction, at the Rooms, Pitt  
street, at 11 o'clock, on TUESDAY, 10th March.  
The station so well-known as the SUGAR-LOAF, situate  
about 20 miles from Armidale, and about 10

GRADING CAPABILITIES—12,000 to 15,000 acres in all seasons.

It is well watered by creeks never known to fail in the driest seasons.

THE IMPROVEMENTS consist of a cottage of rooms, with store attached, detached kitchen, woodshed, with lever press. 2 good men's butts. 3-salt stables. 3-salt

With the Sagar-Loaf will be sold the following sheep:-  
1103 (more or less) wethers, 5 years  
2026 ditto ewes, 6 years  
1156 ditto hoggets, mixed sexes  
1400 ditto wethers and ewes, about equal number  
483 ditto lambs  
50 ditto rams

6327 (more or less) sheep.  
A few head of cattle and horses, working bullocks, drays  
and tackle, stores, implements, &c., to be taken at  
valuation.  
This very eligible pastoral property is situate in a most  
excellent position in the New England district; and, in-  
dependent of its properties as a sheep or cattle run, is  
highly valuable for the right of purchase under pre-empt

By Direction of John Morris, Esq., Official Assignee of the

**Insolvent Estate of Abraham Cohen.**  
**TOWN OF ALBURY, MURRAY RIVER.**  
**Four Valuable Allotments.**  
**M**ORT and CO. have received instructions from John Morris, Esq., to sell by public auction, at the Rooms, Pitt-street, at 11 o'clock, on **FRIDAY 13th March,**  
**FOUR VALUABLE ALLOTMENTS** situate in the **TOWN OF ALBURY,** being allotments numbered

3, 4, 5, and 15 of section 36, as per Government plan, containing each half an acre fronting David and Olive streets.

Albury, since the commencement of steam communication on the Murray River, is steadily advancing in importance, and there can be little doubt that in a very short time it will rank commercially second to no other town in the colony. These allotments are well situated as will be seen on reference to the plan, which may be in-

Valuable Freehold  
**M**R. JOHN TAYLOR is favoured with instructions from the Trustees to sell by public auction, upon an early day, of which due notice will be given.

Several highly valuable freehold properties, known as  
Ellison's Estate, situate in the best part of the  
town, without reserve.  
Plans will shortly be ready, and exhibited at the auction  
mart, in Church-street, next to the new buildings of Messrs  
J. and W. Byrnes.

The whole of his valuable effects, consisting of Tables, bedsteads, bedding, clock, safe, crockery ware, dairy implements, plough, harrow, new cart, drays, cart harness, 7 working bullocks, 30 head of horned stock, consisting of milk cows, heifers, and steers; 100 head of poultry. 10 tons of straw, ear-

**BATHURST.**  
The most valuable and important FREEHOLDS ever  
offered for sale in the Bathurst District.  
1184 Acres, adjoining Blackdown and Hereford  
552 Acres, at the back of Hereford, adjoining the 1184  
Acres.

129 Acres situated upon the Plains, between the estate  
of the Messrs. Tiddell  
500 Acres, on the Windwardale Creek  
400 Acres, opposite the Village of Peel  
2000 Acres, at Millish Murrah  
2560 Acres, at King's Plains  
640 Acres, at Capetoe.

Terms of payment.—25 per cent. cash deposit; the re-  
sidue may remain for three or five years, at 8 per cent. in

**M**ESSRS. TRESS AND CROAKER have been favoured with instructions from John Hoeking, Esq., to sell by public auction, at their Mart next the Union Bank, on MONDAY, 16th day of March at 12 o'clock,  
The whole of the above magnificent properties, in the following order, viz.—  
LOT 1.—1184 acres, adjoining "Hersford" and Black

down, delightfully situated in sight of BATHURST, securely fenced on two sides, and consisting of rich agricultural and open forest land, commanding the most PICTURESQUE VIEWS CONCEIVABLE through which the road runs along the Western boundary to the PEEL VILLAGE and the TURONG MOUNTAINS.

Nearly one-third of this land is on the Plain—is interspersed with clumps of evergreens, and possesses numerous

LOT 3.—533 acres adjoining the above estate, and being equal to it in many respects—a fine, open, undulating tract of forest land, and capable of being made **ONE OF THE PRETTIEST HOMES** in this charming neighbourhood.

LOT 3.—129 acres of very superior land, situated upon the Plains, between the estates of the Messrs. Tindall, subdivided into 7 farms, varying in size from 10 to 32 acres—distance from

Two of these farms have permanent water frontage and upon the other 5, water is usually procurable.

**Lot 4.**—500 acres on the Winburndale Creek, adjoining the property of Sir William Vernon, distant about 10 miles from Bathurst, bounded on the one side by the **CHARMING WINBURDALE RIVULET**. From 40 to 50 acres of this Land is enclosed and under cultivation, and the other improvements consist of good slab hut, stock and sheep yards.

Lot 5.—2560 acres of healthy pastoral country, situated at KING'S PLAINS, known as Jamieson's Grant and having a frontage of more than a mile to King's Plains Creek, independent of which water is to be

Lot 6.—648 acres of valuable land at CARPENTERS known as Jamieson's Grant.  
N. B.—The Auctioneer, in calling the attention of the public to these properties, would remind them that an opportunity of viewing

Parties therefore who are desirous to secure to themselves snug farms and homesteads in the vicinity of Bathurst, would do well to make every preparation to take advantage of the last opportunity.

Title, unexceptionable; particulars of which may be learnt on application at the office of S. R. SELLERS, 79

**P. DIGNAM and CO.** have been favoured with instructions from **J. A. Broughton, Esq.** to announce for sale by public auction, on an early day of which due notice will be given,

Several small farms, being portions of the magnificent estate of GARROORIGANG, adjoining the town of Goulburn. Most of the farms will have frontage to the Murrumbidgee River, and to all water will be secured. The portion of the estate to be submitted consists of a splendid flat, totally free from timber.

•• The opening of this most valuable property to public competition will form an era in the history of Goulburn. The town that has been hitherto so hemmed in (latterly almost to choking) by the growth of the bush, will now

That every acre submitted will be bought up with avidity none can doubt. The land will be put up in lots suitable for market gardens, while very great facilities will be given for dairying on a large scale.

Further particulars will be given in an early issue.

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In the Supreme Court of New South Wales.  
Sheriff's Office, Sydney, 23rd Dec. 1888.

**O**N SATURDAY next, the 28th instant, at noon, at the defendant's residence, Pitt-street Sydney, next the Cottage of Content, the Sheriff will come to be sold a quantity of furniture.  
GEORGE UHR, Under Sheriff.



